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A COMPARATIVE STUDY OF SELECTED MOTOR FITNESS COMPONENT BETWEEN KHO-KHO PLAYERS AND HIGHER SECONDARY STUDENTS

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ABSTRACT

The purpose of the present study was to compare the selected motor fitness component between the Kho-Kho Players and Higher Secondary Students. For this 15 male Kho-Kho Players from Government Higher Secondary School, Chawalpani district Chhindwara (M.P.) and 15 Male Higher Secondary students from Government Higher Secondary School, Jhirpa district Chhindwara (M.P.) age between 16-20 years, were selected as subjects for the study. Thus the total number of subjects for the present study were thirty (N = 30). The variables chosen for the study were Speed, Agility and Explosive Leg Strength variables are tested by using 50 yds run, 4×10 yds shuttle run and standing broad jump respectively. 't' test was applied to investigate the existing of significant difference of the variables between Kho-Kho players and Higher Secondary students. The result of the study showed that there was a significant difference in Speed, Agility and Explosive Leg Strength between Kho-Kho players and Higher Secondary students.

KEY WORD: Speed, Agility and Explosive Leg Strength.

1. INTRODUCTION:

A kho kho playing field is rectangular. It is 27 by 16 metres (89 ft × 52 ft) in length nio. In the middle of these two rectangles, there are two wooden poles. The central lane's dimensions are 24 m × 30 cm. There are eight cross lanes which lie across the central lane, whose dimensions are 16 m × 35 cm. It makes the small rectangles and each of them are 16 m × 2.3 m (the two rectangles of nearby the wooden poles are 2.55 m wide), at right angles to the central lane and divided equally into two parts of 7.85 m (25.8 ft) each by the central lane. At the end of the central lane, the free zone tangent to the post-line, two smooth wooden posts are fixed, 120 cm to 125 cm high from the ground, and their circumference is 28.25 to 31.4 cm. The equipment used in kho kho are poles/post, strings, metallic measuring tape, lime powder, wire nails, two watches, types of rings having inner circumference of 28.25 and 31.4 cm, score shots (like a whistle, for instance), and equipment to record the results. However, for unofficial games, only lime powder (or any substitute) may be used as long as the cross lanes, centre lane and field boundaries are clearly distinguished. The strings, as well as the rings, are for the sole purpose of properly demarcating the same. Worldwide 1960s to now the explosion of fitness awareness throughout the world ushers in the burgeoning fitness industry, with an onslaught of fitness information, scientific studies, celebrity exercise systems, products and services on a scale never seen before, giving the impression that modern civilized humans are committed to healthy bodies. Physical fitness is a general state of health and well-being and, more specifically, the ability to perform aspects of sports or occupations. Physical fitness is generally achieved through correct nutrition, exercise, hygiene and rest. It is a set of attributes or characteristics seen in people and which relate to the ability to perform a given set of physical activities. Kho-Kho is one of the most widely played sports in the India and is a sport characterized by short sprints, rapid acceleration or deceleration, turning, and tackling. Kho Kho is a popular tag game invented in Maharashtra, Ancient India. It is played by teams of 12 nominated players out of fifteen, of which nine enter the field who sit on their knees (chasing team), and 3 extra (defending team) who try to avoid being touched by members of the opposing team. It is one of the two most popular traditional tag games in the Indian subcontinent. Elite Kho-Kho is a complex sport, and performance depends on a number of factors, such as physical fitness, psychological factors, player technique, and team tactics. Schools, College that provide physical education from an early age have understood the importance of all round growth. Physical education helps in development of muscles and bones and children kept fit from an early age. Obesity is a problem among many children and this can be partly solved by stressing on physical education. Obesity can lead to many problems such as diabetes, heart problems and imbalances in hormones in children. Encouraging physical education in schools will help to contain the problem of obesity to an extent. Children who are enrolled in some form of sport or the other reap the benefits in the long run. Some Students show signs of interest in sports from an early age and these prodigies should be encouraged and given the proper amount of guidance in schools. In India several Students are restricted from playing sports, despite showing signs of early excellence. With proper support and systems in place children will be able to bring out the best in themselves and they may even go on to represent the country at some point in the future. Thus, encouraging physical education India is important and schools must realize the potential benefits that can be achieved from just a few hours of activity every day. Thus, the investigator wants to differentiate the motor fitness between Kho-Kho players and Higher Secondary students.

2. STATEMENT OF THE PROBLEM:

The purpose of the study was to compare and investigate the selected motor fitness components between the Kho-Kho Players and Higher Secondary Students.

3. METHODOLOGY:

For the purpose of the study 15 male University Kho-Kho Players and 15 Male Higher Secondary students from Government Higher Secondary School, Chawalpani and Jhirpa district Chhindwara (M.P.) and age range 16 – 20 years was selected randomly as subjects for this study. To compare the Speed, Agility and Explosive Leg Strength the following test are considered.

Player Selection:

1. For speed, the students were asked to run as fast as they can up to 50 yards and the result were recorded to the nearest1/10th seconds
2. 4×10yds Shuttle Run Test were administered to measure agility and the results were recorded to the nearest1/10th seconds
3. Standing Broad Jump was administered to measure explosive leg strength and the results were recorded in feet and inches.

To compute all the results Students "t" test was employed at 0.05 level of significance.

Student "t" test formula

$$t = \frac{m - \mu}{s/\sqrt{n}}$$

Where

t = student t test
m = mean
s = standard deviation
n = variable set size

Rules:

A match consists of two innings with each inning consisting of chasing and running turns of 9 minutes each. One team sits on their knees in the middle of the court, 8 in a row, with adjacent members facing opposite directions. The runners play in the field, three at a time and the team that takes the shortest time to touch all the opponents in the field, wins. There is a pole at each end of the field and the runner is allowed to go between two sitting players, but the chaser is not allowed to turn back while running or go between the players i.e. the chaser must run in the same direction unless he chooses to touch either end pole and run in the opposite direction. He may cross over to the other side when he is reversing directions by going around the pole.

1. The runner or the chaser is decided by toss.
2. A match consists of two innings of chasing and defending turns, which is each of 9 minutes.

3. The captain of chasing side may end the turn before allotted time.

4. The side that scores more wins a match.

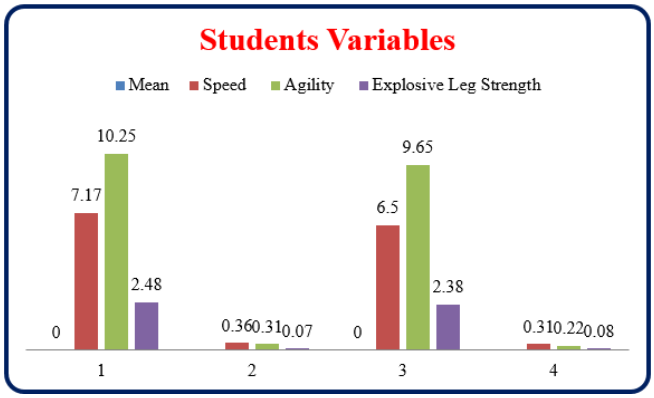
5. When a defender is out, he should enter the sitting box from the lobby.

6. Incomplete match for unavoidable reasons should be played in the same session with the same players and officials. The score of the completed turn should be counted. For incomplete turn, the match will start afresh. The entire match should be replayed from the beginning if the incomplete match is not played in the same session.

4. FINDING:

Students Variables	Kho-Kho Players		Higher Secondary Students		T Ratio
Mean	Standard deviation (SD)		Mean		SD
Speed	7.17	0.36	6.50	0.31	4.47*
Agility	10.25	0.31	9.65	0.22	4.61*
Explosive Leg Strength	2.48	0.07	2.38	0.08	4.75*

Table -1: Mean Standard deviation and "t" test in Speed, Agility, Explosive leg strength, between Kho-Kho Players and Higher Secondary students.



Graph-1: Students Variables

5. DISCUSSION AND FINDING:

The analysis of the data revealed that all the selected motor fitness components namely speed; agility and explosive leg strength differed significantly at 0.05 level of confidence when Kho-Kho Players and Higher Secondary students were compared. The result of the present study revealed that significance differences were found on speed, agility between Soccer Players and Higher Secondary students (Table and Graph-1). In case this two variables Higher Secondary students better than soccer players because Higher Secondary Students are involve various physical fitness training maximum time in their training schedule, their training schedule prepare to 10 months, otherwise soccer players also involve physical fitness training in few days. It also found that there was a significant difference in Explosive Leg Strength of Kho-Kho Players and Higher Secondary students. In case of explosive leg strength soccer players better than Higher Secondary students. Kho-Kho players are mainly doing the different types of drive, kick etc. they are busy various types of jumping skill such as heading, back volley, bicycle volley etc. So case of explosive leg strength Kho-Kho players differs from Higher Secondary students.

6. CONCLUSION:

On the basis of result obtained in the present study following conclusion could be drawn: The Higher Secondary students are significantly better than Kho-Kho Players in Speed and Agility, but Kho-Kho Players better than Higher Secondary Students in Explosive Leg Strength.

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